2.0 Land Use Element

The Land Use Element of the Santan Freeway Corridor Area Plan is presented in the following sections:

2.1 Introduction
2.2 Existing Settings
2.3 Land Use Plan Vision, Goals, Objectives, and Policies
2.4 Land Use Plan
2.5 Implementation Program

2.1 Introduction

The key to a successful development pattern within the Santan Freeway Corridor Study Area is contingent on the adherence to the Land Use Plan. The Plan will provide the City with an interpretive guide for development through the year 2020 and will attempt to incorporate future trends and needs of residents and stakeholders. By adhering to the Land Use Plan, the City will be provided with an opportunity to improve the urban environment and steer development towards becoming a compatible and sustainable community.

The Land Use Element is a guide to decision making for the Santan Area that achieves the following:

- Identifies the general types, locations and pattern of land use in the Santan Area;
- Establishes guidelines for various land use categories depicted on the Land Use Plan;
- Promotes compatible land use and protects incompatible land uses from becoming established adjacent to the freeway corridor; and
- Identifies courses of action and strategies that provide the means to implement the Land Use Plan.

2.2 Existing Setting

The existing Study Area is currently comprised of a mixture of low/medium density residential and agricultural land uses. Positioned at the edge of the current urban growth boundary for the City, the Santan Study Area is beginning a process of land intensification, prompted by a series of private property specific area plans that have identified central Chandler as an area of significant employment opportunity. Year 2000 population estimates for the Study Area identify approximately 15,574 residents, based on Maricopa Association of Governments (MAG) Traffic Analysis Zone data. These figures will show significant increase over the next twenty years as a result of the southward movement of the urban growth boundary.

Current land use within the Study Area is generally limited in its implementation of freeway-compatible land use types, particularly with the continuing development of low to medium density residential properties directly adjacent to the freeway alignment. These properties

will require sound attenuation with regular monitoring of local environmental conditions. Large existing tracts of agricultural land dominate the land use pattern to the east, with the large Pecos Ranch residential development and other subdivisions located on the western boundary of the Study Area. A significant number of large-lot rural residential is interspersed throughout the Study Area, while the highest housing densities are found in the north adjacent to the Arizona Avenue corridor spreading southward from the Downtown area. A number of commercial and industrial properties are located in the Study Area and are primarily confined to arterial corridors.

Municipal facilities within the Study Area includes elementary schools, public parks, the Chandler Water Treatment Facility, a water retention facility, wastewater lift station and multiple telecommunications sites and community churches. The arterial roadway network adheres to the one-mile grid system with established rights-of-way available for future improvements (i.e., widening). Other transportation facilities include the Union Pacific Railroad and a small portion of the Chandler Municipal Airport.

Current Zoning

The City of Chandler and Maricopa County have adopted zoning ordinances to control development within their jurisdictions pursuant to Arizona Revised Statutes (ARS-9-462.01 and 11-821). These ordinances specify permitted land uses and regulate size, height and massing of structures within each district.

Within the Santan Freeway Corridor Study Area, the dominant zoning districts are planned area development (PAD) and agricultural. Planned area development districts are typically residential, but can also include commercial, industrial or mixed-use designations.

Property Ownership

The Santan Freeway Corridor Study Area contains no federal lands, while the Arizona Department of Transportation (ADOT) is currently in the process of acquiring right-of-way for the freeway. Most of the land within the Study Area is privately owned. A small percentage of the Study Area is municipal property used for planned or existing public facilities.

2.3 Land Use Plan Vision, Goals, Objectives, & Policies

Vision Statement:
The City of Chandler seeks to capitalize on the completion of the Santan Freeway through appropriate levels of land use densities and economic development. The Plan will seek to foster the orderly and planned growth of the area and establish criteria that will promote compatible new development and facilitate the preservation of a high quality of life within the community.

Goal 1.0
Guide and control orderly growth to ensure a high quality of life and compatible new development.

Objective 1.1
Promote general land use policies for the Santan Study Area that dictate development criteria for all land use types and encourage sustainable, well-managed growth initiatives.

Policy 1.1.1 Encourage land developers to work together with residents and City staff to develop a mutually agreeable land use plan during any General Plan Amendment or rezoning, platting or other development review processes.

Policy 1.1.2 Discourage the development of noise sensitive institutions or businesses within the Santan Freeway noise impact area without approved provisions for noise mitigation.

Policy 1.1.3 Develop a design review process that ensures compatible growth within the Santan Freeway Corridor Area with consideration to existing urban character.

Policy 1.1.4 Review and update the City zoning ordinance to promote higher intensity land uses adjacent to the Santan Freeway.

Policy 1.1.5 Promote area-wide master planning criteria for all developments.

Policy 1.1.6 Promote compatible land use development and adequate buffering to preserve land and development value.

Policy 1.1.7 Investigate annexation issues concerning County properties within the Santan Study Area.

Policy 1.1.8 Revise the City's zoning ordinance to allow development of high density centers for mixed use residential and employment uses.

Objective 1.2
Promote residential land use policies for the Santan Study Area that will ensure sustainable community growth and cohesiveness through compatible adjacent development initiatives and noise mitigation requirements.

Policy 1.2.1 Protect and preserve the physical and social environment of existing neighborhoods within the Study Area by establishing well defined residential/commercial boundaries.

Policy 1.2.2 Future high-density residential uses may be located to buffer moderate to low density residential areas from vehicular noise and traffic impacts.

Policy 1.2.3 Mitigate freeway generated noise levels in residential developments through implementation of setback requirements and developer sponsored sound attenuation methods.

Policy 1.2.4 The City shall require proposed low density residential development patterns adhere to locations cited in the Santan Freeway Corridor Area Plan.

Policy 1.2.5 The City shall discourage future development of single-family residential be located within one-half mile from the freeway alignment unless approved sound attenuation methods are implemented.

Objective 1.3
To promote development policies for light industrial and commerce-oriented land uses within designated employment areas, with a sufficient buffer from inappropriate adjacent land uses.

Policy 1.3.1 The City should encourage the development of future professional office uses adjacent to the proposed freeway and within the interchange nodes at intersections with arterial roadways.

Policy 1.3.2 The City shall ensure that all office development adjacent to residential development, be adequately buffered and proportionately scaled so as not to adversely impact residential uses.

Policy 1.3.3 Future industrial uses will be located in existing industrial districts and adjacent to the proposed freeway alignment. Proposed "high-tech" and higher image industrial uses will capitalize on freeway corridor visibility and accessibility.

Policy 1.3.4 The City shall promote a campus-like design theme for industrial and office developments within the Study Area.

Policy 1.3.5 The City shall require buffering between commercial and industrial land uses and residential developments.

Objective 1.4
To promote the development of retail commercial land use while adhering to policies that provide for compatible community growth and sustainable economic growth.

Policy 1.4.1 Promote active coordination of public and private interests to implement compatible commercial and recreational activity centers.

Policy 1.4.2 The City shall promote the strategic assets of commercial areas along the Santan Freeway, specifically at the Freeway-Arterial interchanges.

Policy 1.4.3 The City shall discourage uninterrupted stretches of strip commercial development along the frontages of major arterial streets in the Study Area

Interchange Node Specific Planning Objectives

Goal 2.0
To promote development within the interchange nodes that is congruous with the objectives of the Santan Freeway Corridor Area Plan.

Objective 2.1
To prioritize compatible development adjacent to freeway interchange locations with consideration to property access, localized congestion and noise mitigation initiatives.

Policy 2.1.1 The City should encourage compatible employment uses to be located adjacent to the freeway corridor, with proper arterial and freeway access, transitioning to lower intensity uses and buffered from adjacent residential uses.

Policy 2.1.2 The City should encourage regionally oriented retail and service facilities to be located adjacent to freeway corridors, with proper arterial and freeway access, transitioning to lower intensity uses and buffered from adjacent residential uses.

Policy 2.1.3 The City should promote the consolidation of commercial strip frontage lots with limited access along arterial roadways for redevelopment (i.e., Arizona Avenue).

Policy 2.1.4 The City shall require adequate building setbacks along arterial roadways in freeway corridor areas to reduce driver distraction, preserve sight distance and provide for potential road widening.

Policy 2.1.5 The City can require traffic impact assessments (which includes A Trip Generation Analysis) for any proposed development within the Santan Freeway Corridor Area Plan, subject to the discretion of the Public Works Director.

Policy 2.1.6 The intrusion of vehicular traffic generated from intensive development should mitigate opportunities for traffic to impact less intensive adjacent development (i.e., residential).

Policy 2.1.7 The City should ensure, through the analysis of traffic impact studies that street and ramp capacities adequately serve through and locally generated traffic.

2.4 Land Use Plan

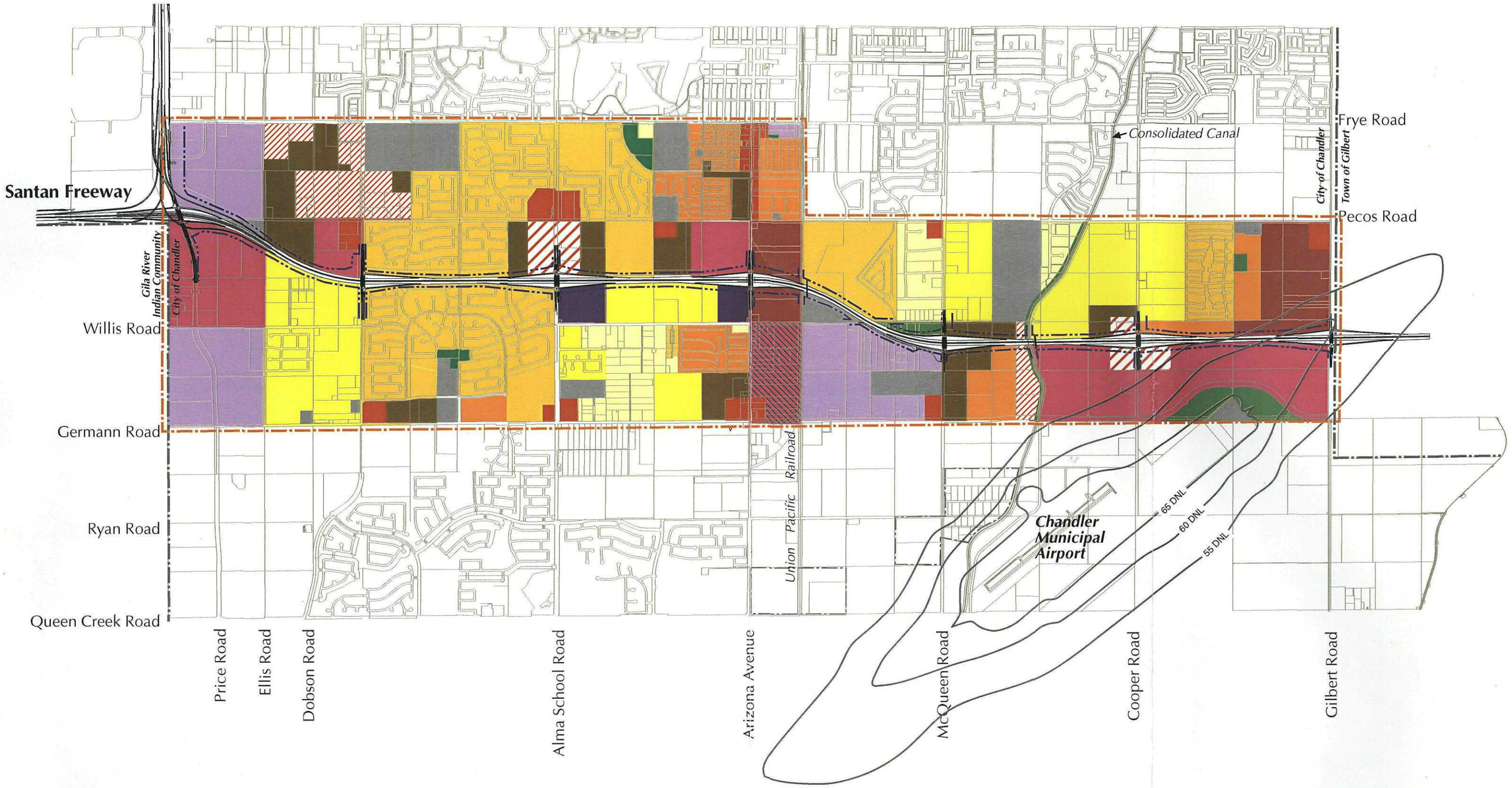
The Santan Freeway Corridor Area Plan, as illustrated on Figure 2-1, *Land Use Plan*, identifies the overall land use pattern within the Study Area. Within the Study Area, freeway interchanges were identified as strategic locations for intensified employment and retail activity. A strong community commercial and commercial/office/business park presence is evident at nearly all interchange locations throughout the Study Area.

The Price Road employment corridor has been preserved for a combination of light industrial and commercial/office/business park uses. Improved access to the corridor as a result of the Santan and Price freeway construction and the improved visibility of development adjacent to the interchange, translates into a compatible land use for the area. A majority of the Price Road corridor will be confined to the area between Ellis Street on the east and the Study Area boundary on the west. Ellis Street will serve as a buffer for the proposed low/medium density residential development proposed for the area to the east.

The Downtown Area in the northern portion of the Study Area will continue to encourage the development of commercial land uses along the Arizona Avenue corridor south to Pecos Road. Appropriate land uses in addition to existing residential include; high-density residential, commercial and office uses. This intensification will be compatible with the growth of the Chandler Downtown and focus on the Downtown as an important employment element in the City improvement vision.

The Hospital Area will continue to experience demand for high density residential and professional/medical office space as the Regional Hospital continues to expand its facilities. The combination of employment and assisted care facilities will drive the need for high density residential development adjacent to the hospital/office core.

The Airpark Area overlaps the Santan Study Area by three square miles between Arizona Avenue and Gilbert Road. Existing land use designations within this area are sensitive to freeway and airport generated noise impacts, located to the south. Appropriate land uses identified for this area include commercial/office/business park and regional commercial to the south of the freeway alignment and a combination of variable housing densities, public and commercial land uses to the north.



Santan Freeway Corridor Area Plan
City of Chandler

- Rural Residential (0-1.5 du/acre)
- Low Density Residential (1.6-3.5 du/acre)
- Low/Medium Density Residential (2.6-8 du/acre)
- Medium Density Residential *(8.1-12 du/acre)*
- High Density Residential *(12+ du/acre)*
- Neighborhood Commercial
- Community Commercial
- Regional Commercial
- Special Use Commercial
- Commercial/Office/Business Park
- Office
- Light Industrial
- Public/Semi-public Facilities
- Parks & Open Space
- Light Rail Corridor Overlay *(Potential Mixed Use)*

- Freeway Right-of-way
- Study Area Boundary
- Municipal Boundary
- XX 2020 Noise Contour

Figure 2-1
Land Use Plan

D&M GROUP BRW
A DAMES & MOORE GROUP COMPANY
9/30/99

Remaining portions of the Study Area include high proportions of low/medium density residential housing distributed throughout the Study Area and community commercial and neighborhood commercial nodes at arterial-arterial and arterial-interchange nodes. Small pockets of rural and low density residential, public and special use commercial are also found within the Study Area.

The Plan identifies approximately 4,025 acres of net developable housing as shown in Table 2.1, *Land Use Calculations*. This translates to a total dwelling unit count of 14,167 for the Study Area and a resultant population of 32,932 persons. Employment within the Study Area is concentrated within the Price Road Corridor and the northern portions of the Airpark Area. These areas will experience the majority of the projected 45,859 employment positions designated by land uses within the Santan Area, with others areas including the Hospital and Arizona Avenue nodes. Approximately 24,766 jobs are associated with the office and commercial/office/business park designations, totaling 54 percent of all employment within the Santan Study Area at buildout.

Approximately 516 acres have been designated within the Santan Area for variable types of commercial development, 1,224 acres for commercial/office/business park and light industrial uses and 309 acres reserved for public/semi-public uses. Approximately 82 acres have been dedicated to recreational open space located throughout the area's existing parks.

Due to the high level of development activity within the Study Area during the planning process, only a small proportion of the Study Area remains unplanned. A significant percentage of the area has been approved under conceptual zoning status in 1999. Figure 2-2, *Unplanned Land*, illustrates unplanned, vacant land within the Santan Freeway Corridor Study Area.

Land Use Definitions and Guidelines

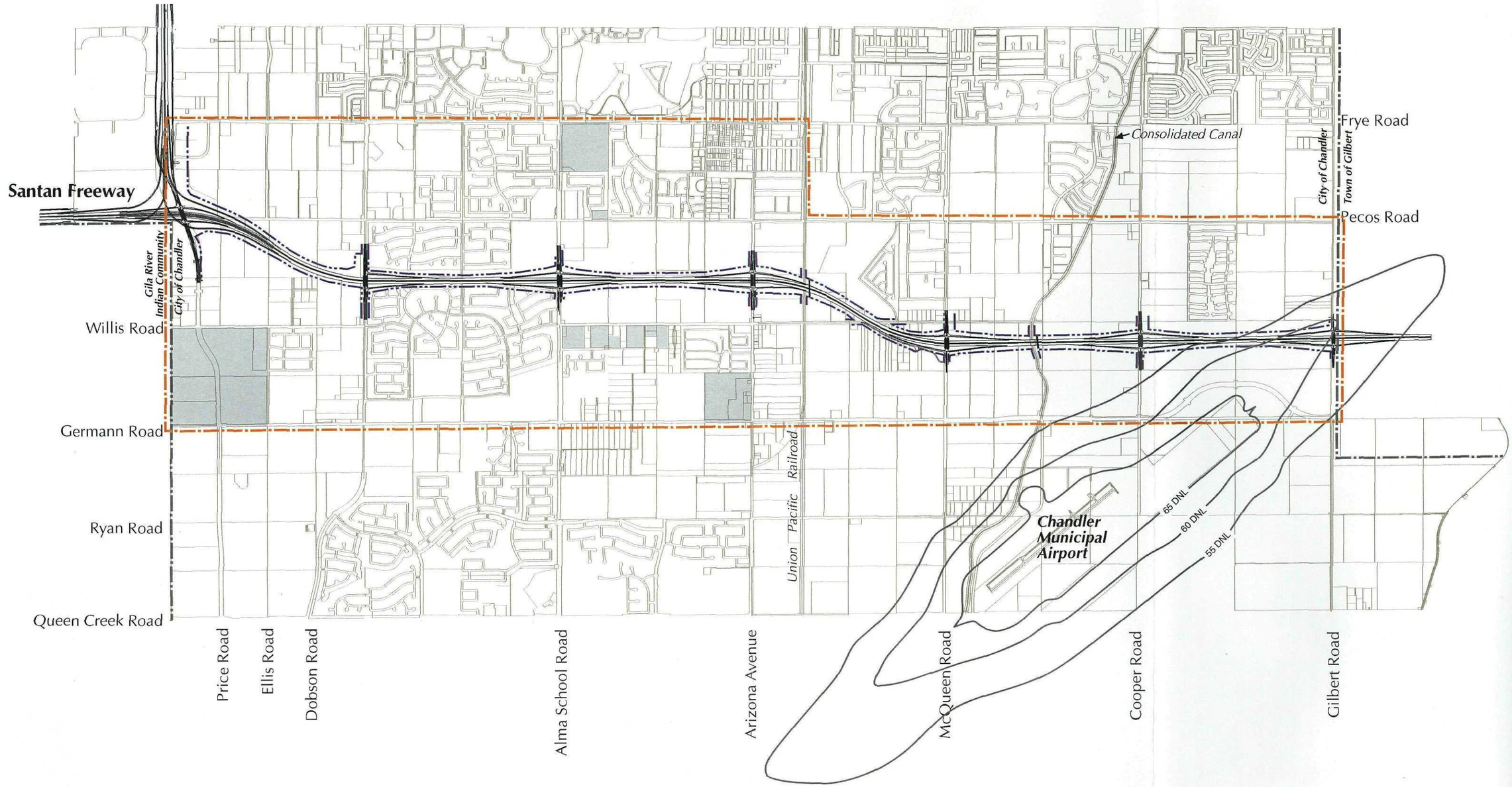
Land use within the Study Area is defined by the following categories. Residential categories are aggregated into five independent types that are defined largely by density and structure type. Commercial uses include neighborhood, community, regional, special use and commercial/office/business park, defined by use and the floor to area ratio. Other categories include Light industrial, Public/Semi-Public and Parks/Open Space. In addition to the following definitions, Table 2.2, *City of Chandler Land Use Categories and Standards*, further defines land use types within the City of Chandler.

Table 2.1
Land Use Calculations

Land Use Categories	Gross Acres	Efficiency Factor	Net Development Acres	Density/ Intensity	Total Dwelling Units	Population/ Dwelling Unit	Resultant Population	Employment Factor (1 employee/ #sq.ft)	Resultant Employment
Rural Residential	232	0.95	220	1	220	2.8	617	-	-
Low Density Residential	688	0.9	619	2.5	1,548	2.7	4,180	-	-
Low/Medium Density Residential	1,163	0.8	930	6	5,582	2.5	13,956	-	-
Medium Density Residential	342	0.8	274	10	2,736	2.2	6,019	-	-
High Density Residential	320	0.85	272	15	4,080	2.0	8,160	-	-
Neighborhood Commercial	124	0.8	99	0.23	-	-	-	400	2,485
Community Commercial	80	0.8	64	0.23	-	-	-	400	1,603
Regional Commercial	212	0.8	170	0.23	-	-	-	400	4,248
Special Use Commercial	100	0.8	80	0.23	-	-	-	400	2,004
Office	50	0.80	40	0.23	-	-	-	250	1,603
Commercial/Office/Business Park	680	0.85	578	0.23	-	-	-	250	23,163
Light Industrial	494	0.85	420	0.32	-	-	-	680	8,607
Public/Semi-Public Facilities	309	0.85	263	0.15	-	-	-	800	2,145
Parks and Open Space	82				-	-	-		
Total	**4,876**		**4,025**		**14,167**		**32,932**		**45,859**

Overall Net Housing Density (du/ac)	6.1

Source: BRW, 1999.



Santan Freeway Corridor Area Plan
City of Chandler

Legend

- Unplanned Land
- Freeway Right-of-way
- *Study Area Boundary*
- Municipal Boundary
- XX 2020 Noise Contour

Figure 2-2

Unplanned Land

D&M GROUP BRW
A DAMES & MOORE GROUP COMPANY

9/30/99

Table 2.2
City of Chandler
Land Use Categories and Standards

Land Use Category	Typical Development Standards	General Development Characteristics
Rural Residential	0 - 1.5 DU per Acre	One- to two-story single-family detached homes on large lots
Low Density Residential	1.6 - 3.5 DU per Acre	One- to two-story single-family detached homes on lots in excess of 7,000 square feet
Low-Medium Density Residential	2.6 - 8.0 DU per Acre	Housing types found in low density areas on smaller lots and areas of transitional land use
Medium Density Residential	8.1 – 12.0 DU per Acre	Includes townhomes and condominiums, typically located adjacent to high intensity land uses
High Density Residential	12.1 – 18.0 DU per Acre	Multi-family developments which include apartments and condominiums
Neighborhood Commercial	Site Size = 10 to 20 acres	Provides for the development of smaller scale commercial areas to serve adjacent neighborhoods within 1 or 2 miles
Community Commercial	Site Size = 30 to 40 acres	Large retail centers located along arterial corridors and activity nodes, serving a market radius of 2 to 4 miles
Regional Commercial	Site Size = 40 to 200 acres	Encompasses the entire range of large-scale retail and service activities and will serve the region, immediate community and tourist/traveler trade
Special Use Commercial	Site Size = N/A	Will service the retail commercial established in conjunction with the Paseo System and may be integrated with moderate to high density residential
Commercial/Office/Business Park	Site Size = 10 to 200 acres	Includes office and business complexes and promotes a campus oriented environment
Light Industrial	Site Size = 10 to 200 acres	Encompasses low intensity uses such as warehousing and light or high-tech manufacturing industries
Public/Semi-Public Facilities	Site Size = 1 to 640 acres	Properties designated for a variety of municipal and quasi-public uses to include: utilities, public services and educational institutions
Parks & Open Space	N/A	Includes all municipal park properties and open space areas

Source: BRW, Inc., 1999.

Residential Uses

Rural Residential (0-1.5 DU/AC)

Rural Residential denotes areas where low-density single family residential development is preferred based upon a desire to retain the rural character of a given location, and/or due to environmental constraints or limited infrastructure. The density ranges from 0 to 1.5 dwelling units per acre.

Low Density Residential (1.6 - 3.5 DU/AC)

Low Density Residential denotes areas where increased residential density can be accommodated, within a range of 1.6 to 3.5 dwelling units per acre. Public infrastructure is required to serve this density of residential development. In general, this category is intended to serve as a transition between rural areas and areas with more intense residential uses.

Low-Medium Density Residential (2.6 – 8.0 DU/AC)

Low-Medium Density Residential denotes areas where moderate intensities of primarily single family residential uses are appropriate, based upon existing patterns of development, available transportation and other infrastructure, and proximity to service, employment, and retail facilities. Public infrastructure is required to serve this density of residential development. A variety of housing forms may be developed, including townhouses and low profile, condominiums. Institutional uses, such as schools, convalescent facilities, or religious facilities, may be appropriate, if sited in locations that minimize impacts on adjacent residential uses. Residential density ranges from 2.6 to 8.0 dwelling units per acre.

Medium Density Residential (8.1 – 12.0 DU/AC)

Medium Density Residential denotes areas generally located within established development corridors, close to retail, transit services, and employment uses, where multi-family residential uses are appropriate. Infill housing development may also be appropriate as a means of maximizing infrastructure investments. A variety of housing types and styles are permitted in order to serve the needs of a wide range of demographic and income groups. Specialized forms of housing (e.g., elderly, affordable, group homes) may also be appropriate. The residential density ranges between 8.1 and 12.0 dwelling units per acre.

High Density Residential (12.1 – 18.0 DU/AC)

High Density Residential denotes where high density residential projects are appropriate. This includes existing urban settings or where substantial development intensity is desired. The actual developed densities will depend on project quality, available infrastructure capacity, and development impacts. The high residential

densities possible in these locations would provide substantial support to service and retail uses in the area. The density ranges from 12.1 to 18.0 dwelling units per acre depending on site suitability, project quality and demonstrated need.

Commercial Uses

Neighborhood Commercial

Neighborhood Commercial denotes where neighborhood-based commercial uses, such as clustered retail, personal services, restaurant, and entertainment uses are appropriate. These areas will typically attract patrons from a relatively small (1 mile) radius. Total building area is typically 30,000 to 140,000 square feet.

Community Commercial

Community Commercial denotes where community commercial uses such as clustered retail, personal services, restaurant, and entertainment uses are appropriate. These areas will typically attract patrons from two to four miles. Total building area is typically 140,000 to 300,000 square feet.

Regional Commercial

Regional Commercial denotes areas appropriate for regional retail and employment uses with convenient access, and where impacts on adjacent development are minimized. A wide variety of retail, service, hotel, and office employment uses are allowed. Total building area is typically 400,000 to 1.5 million square feet.

Special Use Commercial

Special Use Commercial denotes area where mixed-use destination oriented and high quality commercial development may take place. Special commercial areas may include a combination of retail, service, entertainment and office development. These areas are intended to develop as retail and entertainment uses along the Paseo System. Mixed-use developments are preferred over single-use projects as a means of maximizing the economic use of land and promoting a vibrant, pedestrian-oriented urban environment. Several of the special use commercial areas located in the Hospital Gateway Area Plan, as per the approved area plan on file, north of Pecos Road between Ellis Street and Dobson Road, may be well-suited for medium and high density residential, including adult assisted-care living subject to quality, site suitability, demand/need, compatibility and infrastructure.

Office/Industrial Uses

Office

Office denotes attractive corporate and professional buildings, supporting professional business and services such as law offices, corporate headquarters and business associations. Buildings are mid- to high-rise with appropriate landscape screening adjacent to residential areas.

Commercial/Office/Business Park

Commercial/Office/Business Park denotes major, campus-like employment centers that may include support retail services, research and development, or office/showroom development. Design standards should be applied to ensure a consistent and high quality physical project.

Light Industrial

Light Industrial identifies locations suitable for appropriate manufacturing, warehousing and distribution, back office space, and high tech uses. Site and facility design should balance function with aesthetics and amenities.

Other Uses

Public/Semi-Public Facilities

Public/Semi-Public Facilities encompasses existing or planned public uses such as schools, community centers, government facilities, libraries, hospitals, educational campuses, and similar uses.

Parks and Open Space

Parks and Open Space applies to areas used for active and passive recreation, formal parks, or natural resource conservation areas.

Development Influence Factors

Development within the Santan Freeway Corridor Study Area will continue to be influenced by a number of regional elements. These elements provide variable levels of influence based on economic, transportation and quality of life relationships. Relative to the Santan Freeway Corridor, the following seven influence factors were evaluated.

- Santan Freeway (AZ Loop 202)
- Union Pacific Railroad Corridor
- Consolidated Canal (Paseo System)
- Arterial Roadways
- Public Facilities
- Price Freeway (AZ Loop 101)
- Chandler Municipal Airport
- Gila River Indian Community

Santan Freeway (AZ Loop 202)

The Santan Freeway (Arizona State Route 202) alignment runs through the north end of the Study Area just south of the Pecos Road alignment and north of Germann Road. Within the Study Area, freeway construction between the Price Freeway and Arizona Avenue is scheduled for completion in 2004. The remaining alignment within the Study Area form Arizona Avenue to Gilbert Road is scheduled for completion in 2005.

The Santan Freeway represents the most influential component of the Study Area serving as a regional transportation link for residents of southeast portions of the Phoenix Metropolitan Area. Interchanges at nearly every arterial intersection throughout the Study Area will facilitate access to and from the freeway onto the local roadway network. Interchange locations will exist within the Study Area at Price Road, Dobson (restricted access to/from west), Alma School Road, Arizona Avenue, McQueen Road, Cooper Road and Gilbert Road.

By establishing a high level of regional connectivity, opportunities for employment oriented activity will increase significantly. Freeway interchanges provide for the development of commercial nodes, office parks, or other high intensity land uses. The freeway will also provide regional access to Downtown Chandler from Arizona Avenue and the Airpark Area from Cooper Road.

When considering potential uses directly adjacent to the Santan Freeway corridor, priority was given to those uses most compatible with the freeway. Construction plans for the Santan Freeway do not currently include frontage roads, so uses adjacent to the freeway will not benefit from the additional buffer that frontage roads often provide. In residential areas, sound walls and/or large landscaped areas may be needed to mitigate freeway impacts. These potential impacts include noise, dust, pollution, and visual intrusion.

Union Pacific Railroad Corridor

The Union Pacific Railroad Corridor runs north and south through the Study Area approximately one-quarter mile east of Arizona Avenue. Rail activity through the existing corridor is minimal, with intermittent use primarily for agricultural/produce transport.

The rail line has been recognized as a potential shared commuter and freight rail corridor within the Study Area and could potentially see a re-intensification of use as opportunities for heavy rail freight transport and commuter rail alternatives evolve.

Consolidated Canal (Paseo System)

The Consolidated Canal currently provides irrigation for local farming activity in South Chandler and the Gila River Indian Community. As agricultural land uses continue to be displaced by development, the irrigation role of the canal will diminish, establishing a need for the City to investigate the future role of the canal system within the study area.

The City of Chandler has identified the Consolidated Canal as an area of significant recreational opportunity and is prepared to fund development of the corridor to allow pedestrian, bicycle and equestrian uses to achieve shared access. The City of Chandler Paseo Design Guidelines for the Consolidated Canal have identified appropriate adjacent uses that could include retail, restaurants, offices, resort/hotel, cultural facilities and high density residential, in addition to existing low density residential uses, as per the Chandler Land Use Element and Airpark Area Plan.

Arterial Roadways

An important component of development within the Santan Freeway Corridor relates to vehicular access throughout the area. The City's regional arterial roadway network is typical of circulation patterns found within the Phoenix Metropolitan Area, forming a grid-like network on one-mile section lines. These arterial roadways serve as the primary traffic facilitation elements and assist the transition of traffic movement from freeways to reduced volume roadways and commercial nodes. The arterial roadways located within the Santan Study Area include:

North-South Arterial Streets
- Price Road
- Dobson Road
- Alma School Road
- Arizona Avenue
- McQueen Road
- Cooper Road
- Gilbert Road

East-West Arterial Streets
- Pecos Road
- Germann Road

Arterial roadways (excluding Cooper Road) will have an ultimate width of six lanes with separate sidewalk and bicycle lanes in a 130-foot right-of-way. These streets provide the main source of vehicular mobility and access to the various activity centers located in the Study Area, and serve as a link between the freeway and the airport. The intersections of these arterials are the preferred locations for neighborhood and community commercial nodes, as well as other service-oriented facilities such as hotels, gas stations, and restaurants. Where these arterials intersect with the freeway, commercial office uses or regional commercial centers are appropriate.

Public Facilities

Public facilities within the study area assist in supporting development throughout the study area. Public infrastructure is comprised of area roadways, utilities and additional City improvements. Public facilities serve a social and cultural role in supporting the community

and include schools, institutions, hospitals, infrastructure support and recreational areas. Land uses adjacent to these facilities must be carefully evaluated in some cases, with an emphasis placed on buffering and screening.

Price Freeway (AZ Loop 101)

The Price Freeway, when completed, will serve as the primary artery for traffic movement in and out of Chandler from the Mesa and Tempe areas. Linking with the Santan Freeway at an interchange located on the western boundary of the Study Area, the freeway will serve as a catalyst for economic development adjacent to the alignment. The Chandler Santan Fashion Center is a result of the improved regional access afforded by the freeway, in addition to a large number of existing high-tech and industrial employment sites.

Chandler Municipal Airport

The Chandler Municipal Airport, located southeast of the Santan Study Area, is situated on 394 acres surrounded by a variety of fixed base operations. As the Chandler Municipal Airport continues to develop under the Chandler Airpark Area Plan, the facility will become a dominant economic and employment generator within Chandler. An integrated approach to regional commerce and transportation development within the context of the Airport and established links to the Metropolitan Area, is the key to the success of the Airpark's growth potential.

An inventory of airside facilities at the Municipal Airport includes a parallel runway system, the longest measuring 4,850 feet, with associated taxiway, lighting and navigational systems. The Airport estimates that approximately 167,300 flight operations occurred during 1998, rising to 300,000 annual flight operations by 2020 (Airport Master Plan, 1998). The airport will continue to function as a general aviation airport.

Gila River Indian Community

The Gila River Indian Community borders the Study Area on the western edge, parallel to the Price Road alignment. The Indian Community has a population of approximately 11,500 and has not established any commercial or housing development adjacent to the Study Area. Development within the Chandler municipal boundaries, coupled with the regional access opportunities of the Santan and Price freeways, may create a demand for housing and employment growth on community land. A combination of regional freeway access, projected development densities and a planned retail/employment core at the Santan and Price Freeway interchange may create a market for retail or employment type land uses.

Buffering Requirements

All new developments within the Study Area should adhere to City of Chandler guidelines for appropriate noise mitigation including sound walls, substantial physical separation, absence of noise impacts or other functional barriers. Residential development adjacent to the freeway corridor is discouraged and if approved, should include provisions to include appropriate setback and open space criteria for separation and impact mitigation.

In areas where opportunities for planned development exist, lower density residential should be discouraged. High density residential may be acceptable but should implement noise mitigation techniques into the development process, as approved by the City. Residential areas should observe proper transitional techniques to include landscaped and open space buffers (i.e., parks and retention basins) and separations, such as roads and canals.

Commercial and industrial areas should be adequately buffered from residential areas through open space and landscaping, as well as other design techniques. Roads, freeways, railroad tracks and canals also provide good separation from non-residential land uses when combined with appropriate setbacks. Building heights should be graduated from highest to lowest to conform to those on adjacent parcels. Colors and materials should blend with the character of the surrounding developments and neighborhoods. Non-residential buildings should be designed to respect the scale, mass and privacy of surrounding developments. Architectural designs should apply to all four sides of buildings and avoid unbroken building facades and repetition.

Streetscapes should be pedestrian-friendly and provide for attractive landscaping and building setbacks. Wall and fence treatments should include staggering and variety of color to achieve a unique design form. Streets should be well lighted with easy-to-read monumentation and street signs.

Phasing

Development within the Study Area should be phased in response to market demands and absorption rates according to a logical and orderly extension of roadways, public utilities, and other infrastructure. Water, sewer, electricity, and other utility improvements, when phased properly, will ensure the Study Area reaches full buildout without creating leap-frog development or increased infrastructure costs. Ideal phasing should occur in a general northwest to southeast direction, with development occurring along the freeway corridor first.

Demand for development in the City of Chandler is centered on residential and neighborhood commercial. These land use designations will most likely be the first to reach buildout capacity. As residential single family and multi-family housing are completed, the community will be able to support neighborhood and community commercial services. The completion of the Santan Freeway will also enhance the rate of development adjacent to the freeway corridor.

2.5 Land Use Implementation Program

Table 2.3, *Land Use Implementation Program*, identifies the land use implementation measures that the City should take to implement the goals and policies of the Santan Freeway Corridor Land Use Plan. The implementation program lists the specific implementation measures, timeframe, key participants, and the resources necessary to accomplish each implementation measure.

Table 2.3
Land Use Implementation Program

Implementation Measure	Timeframe (Years)				Key Participants	Resources
	1-2	3-5	5-10	10-20		
Establish buffer zones adjacent to the freeway corridor through process of an open space acquisition plan	*	*			City Planning Staff, Planning and Zoning Commission and City Council	Developer Dedications or Reservations, Heritage Funds, G.O. Bonds
Annex remaining County islands within the Study Area as warranted by development opportunities	*	*	*	*	City Planning Staff, Planning and Zoning Commission and City Council	Staff Resources
Establish a process for integrating recommended land uses with zoning actions	*				City Planning Staff, Planning and Zoning Commission and City Council	Incorporate in General Plan, Rezoning Applications
Enhance buffering requirements for future development adjacent to the freeway corridor	*	*	*		City Planning Staff, Planning and Zoning Commission and City Council	Developer Reservations or Dedications, Heritage Funds, G.O. Bonds
Construct a Gateway monument north of the Arizona Avenue/Santan Freeway interchange		*			Public Works Department and City Council	Developer Contributions, General Funds
Encourage redevelopment south of the downtown area through land acquisition and assemblage along Arizona Avenue	*	*	*		City Planning Staff, Economic Development Staff, Planning and Zoning Commission and City Council	G.O. Bonds, Private/Public Redevelopment Partnerships
Continue to pursue availability of funding sources for purposes of neighborhood revitalization	*	*			City Planning Staff, Redevelopment Services, Planning and Zoning Commission and City Council	State, Federal and Private Funding Sources

Source: BRW, Inc., 1999.

Definitions:

- *Implementation Measure* - Lists the action necessary to carry out the Land Use Plan Element of the Santan Area Plan.
- *Purpose* - Identifies the intent of accomplishing that particular action.
- *Timeframe* - Establishes the target 5-year priority within the 20-year planning horizon for implementation of the action.
- *Key Participants* - Assigns the elected or appointed public body, agency, group, individuals or volunteers principally responsible to initiate the implementation action.
- *Resources* - Lists the potential funding, City staff, volunteer or other community resources necessary to carry out the implementation action.